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# PALB2 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI15014

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q86YC2 |
| **Other Accession** | NM_024675, BAB15140 |
| **Reactivity** | Human |
| **Predicted** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 131295 |

## Additional Information

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| **Gene ID** | 79728 |
| **Alias Symbol** | FANCN, PNCA3 |
| **Other Names** | Partner and localizer of BRCA2, PALB2, FANCN |
| **Format** | Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. |
| **Reconstitution & Storage** | Add 50 ul of distilled water. Final anti-PALB2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles. |
| **Precautions** | PALB2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | PALB2 |
| **Synonyms** | FANCN |
| **Function** | Plays a critical role in homologous recombination repair (HRR) through its ability to recruit BRCA2 and RAD51 to DNA breaks (PubMed:16793542, PubMed:19369211, PubMed:19423707, PubMed:22941656, PubMed:24141787, PubMed:28319063). Strongly stimulates the DNA strand-invasion activity of RAD51, stabilizes the nucleoprotein filament against a disruptive BRC3-BRC4 polypeptide and helps RAD51 to overcome the suppressive effect of replication protein A (RPA) (PubMed:20871615). Functionally cooperates with RAD51AP1 in promoting of D-loop formation by RAD51 (PubMed:20871616). Serves as the molecular scaffold in the formation |

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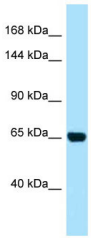
| | of the BRCA1-PALB2-BRCA2 complex which is essential for homologous recombination (PubMed:19369211). Via its WD repeats is proposed to scaffold a HR complex containing RAD51C and BRCA2 which is thought to play a role in HR-mediated DNA repair (PubMed:24141787). Essential partner of BRCA2 that promotes the localization and stability of BRCA2 (PubMed:16793542). Also enables its recombinational repair and checkpoint functions of BRCA2 (PubMed:16793542). May act by promoting stable association of BRCA2 with nuclear structures, allowing BRCA2 to escape the effects of proteasome-mediated degradation (PubMed:16793542). Binds DNA with high affinity for D loop, which comprises single-stranded, double-stranded and branched DNA structures (PubMed:20871616). May play a role in the extension step after strand invasion at replication-dependent DNA double-strand breaks; together with BRCA2 is involved in both POLH localization at collapsed replication forks and DNA polymerization activity (PubMed:24485656). |
| **Cellular Location** | Nucleus Note=Colocalizes with BRCA2 and BRCA1 in nuclear foci |

## References


Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Martin J.,et al.Nature 432:988-994(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Xia B.,et al.Mol. Cell 22:719-729(2006).


## Images




WB Suggested Anti-PALB2 Antibody Titration: 1.0 µg/ml
Positive Control: Hela Whole CellPALB2 is supported by BioGPS gene expression data to be expressed in HeLa


Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.